

General:	Units	Clear Sky	Faded
Emission Designator		1M38G7D	1M38G7D
Data Rate	kbit/s	952.5	952.5
Modulation		QPSK	QPSK
Coding Rate		0.4970	0.4970
Carrier Bandwidth	kHz	1380	1380
Uplink Frequency	GHz	29.75	29.75
Downlink Frequency	GHz	19.95	19.95
Uplink:			
Tx E/S Antenna Diameter	m	0.67	0.67
Tx E/S Power to Antenna	W	2.5	2.5
Tx E/S Antenna Gain	dBi	44.5	44.5
Tx E/S EIRP per Carrier	dBW	48.5	48.5
Tx E/S Antenna Pointing Loss	dB	0.5	0.5
Atmospheric and Rain Losses	dB	0.5	4
Free Space Loss	dB	213.6	213.6
G/T toward Tx E/S (-3 dB)	dB/K	3.5	3.5
C/I - Intra-system	dB	30.0	30.0
Downlink:			
EIRP per Carrier towards Rx E/S (-3 dB)	dBW	34.8	31.3
Atmospheric and Rain Losses	dB	0.3	8
Free Space Loss	dB	210.1	210.1
Rx E/S Antenna Pointing Loss	dB	0.8	0.8
Rx E/S Antenna Diameter	m	7.3	7.3
Rx E/S Antenna Gain	dBi	61.8	61.8
Rx E/S G/T	dB/K	37.8	35.3
System Noise Temp (LNA+Sky)	K	250	442
C/I - Intra-system	dB	16.0	16.0
End-to-End:			
C/N - Thermal Uplink	dB	5.4	1.9
C/I Up - ASI	dB	19.5	16.0
C/N - Thermal Downlink	dB	29.4	15.7
C/I Down - ASI	dB	28.8	28.8
C/(N+I) - Total Actual	dB	4.8	1.4
C/N - Required	dB	1.4	1.4
Excess Margin	dB	3.4	0.0